

Date: Tuesday, 10/02/2009 3:09:09 PM  
 User: Julie Dawson

## Process Sheet

<b>Customer</b> : CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> : GPS RECEIVER HOUSING
<b>Job Number</b> : 45713	
<b>Estimate Number</b> : 12494	
<b>P.O. Number</b> :	<b>Part Number</b> : D35147
<b>This Issue</b> : 10/02/2009 <b>S.O. No.</b> :	<b>Drawing Number</b> : D3514 REV A
<b>Prsht Rev.</b> : NC	<b>Project Number</b> : N/A
<b>First Issue</b> : / / <b>Type</b> : SMALL /MED FAB	<b>Drawing Revision</b> : A
<b>Previous Run</b> : 35375	<b>Material</b> :
<b>Written By</b> :	<b>Due Date</b> : 28/02/2009 <b>Qty:</b> 2 <b>Um:</b> Each
<b>Checked &amp; Approved By</b> : <u>JLD 09.02.10</u>	
<b>Comment</b> : Est Rev:A New Issue 07-09-24 JLM verified by DD	

## Additional Product

Job Number:



<b>Seq. #:</b>	<b>Machine Or Operation:</b>	<b>Description :</b>
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1.0	6061T6S040	6061-T6 .040 Sheet
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**Comment:** Qty.: 0.2518 sf(s)/Unit Total: 0.5036 sf(s)

6061-T6 .040 Sheet

(M6061T6S040)

Batch: 109396

ml 09 03 02 (2)

2.0	WATER JET	FLOW WATER JET
-----	-----------	----------------

**Comment:** FLOW WATER JET

1-Cut as per Dwg D3514

Dwg Rev: AProg Rev: A

\*\*\*Ensure Grain Direction is correct\*\*\*\*\*

2-Deburr if necessary

ml 09 03 02 (2)

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--

**Comment:** INSPECT PARTS AS THEY COME OFF MACHINE

ml 09 03 02

(2)

4.0	QC8	SECOND CHECK
-----	-----	--------------

**Comment:** SECOND CHECK

8 09/03/02 (2)

5.0	BRAKE NC	NC BRAKE
-----	----------	----------

**Comment:** NC BRAKE

Form Joggle as per Dwg D3514

SB 09/04/15 (2)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Tuesday, 10/02/2009 3:09:09 PM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: GPS RECEIVER HOUSING

Job Number: 45713

Part Number: D35147

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

09/04/15 (2)

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

91

09-04-15

(V2)

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

FL 09/04/15 (2)

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: ST 234A

\* 09/04/15

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/04/15

Job Completion



MF 09-04-15

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

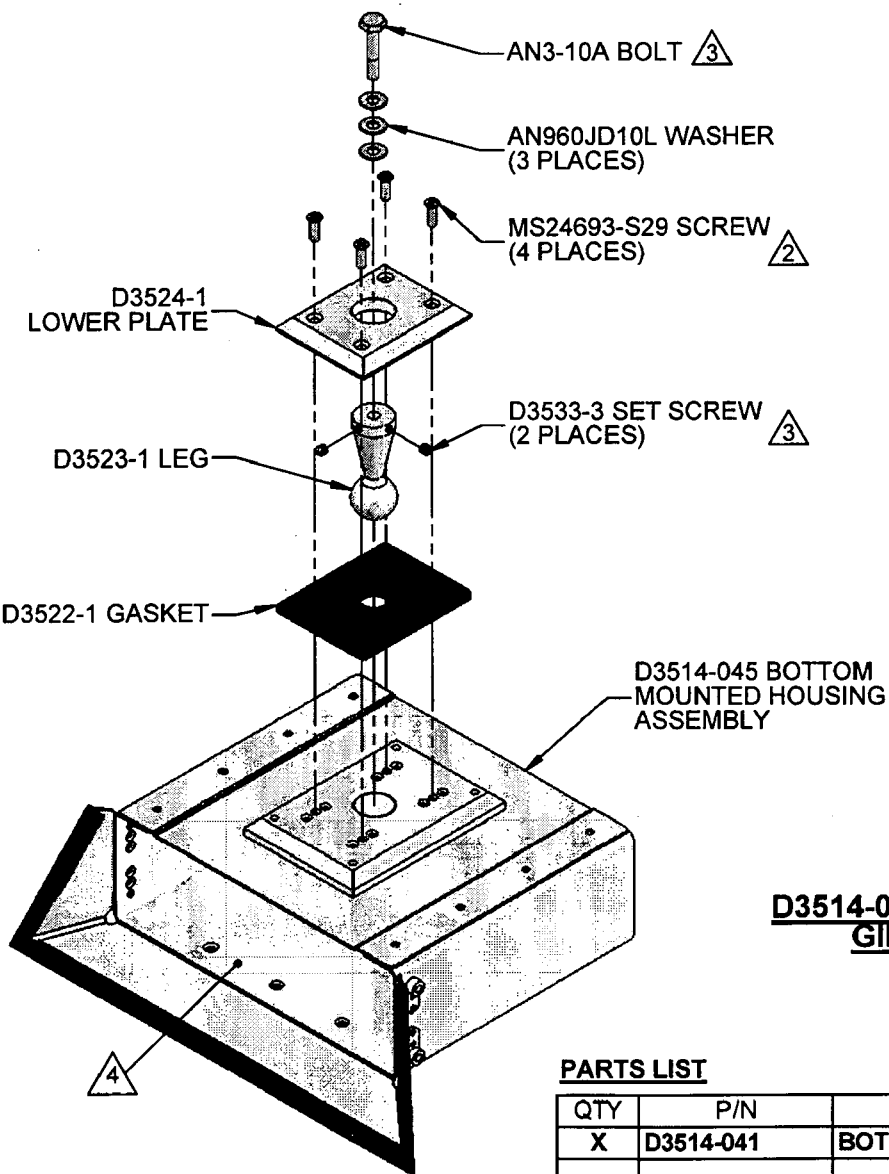
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries





DESIGN CB	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED CE	APPROVED [Signature]	DRAWING NO. D3514	REV. A SHEET 1 OF 9
DATE 07.06.18		TITLE GPS RECEIVER HOUSING	SCALE 1:3
REV A	DATE 07.06.18	DESCRIPTION NEW ISSUE	



RELEASED  
07.08.03

**D3514-041 BOTTOM MOUNTED  
GIMBAL ASSEMBLY**

45713

**NOTE:**  
1) ASSEMBLE PER DART QSI 003  
2) TORQUE SCREWS TO 5-6 in-lbs  
3) TIGHTEN TO SNUG FIT ONLY  
4) IDENTIFY WITH DART P/N "D3514-041"  
USING A WHITE MARKER ON THE INSIDE  
OF THE HOUSING ASSEMBLY WHERE  
INDICATED

**PARTS LIST**

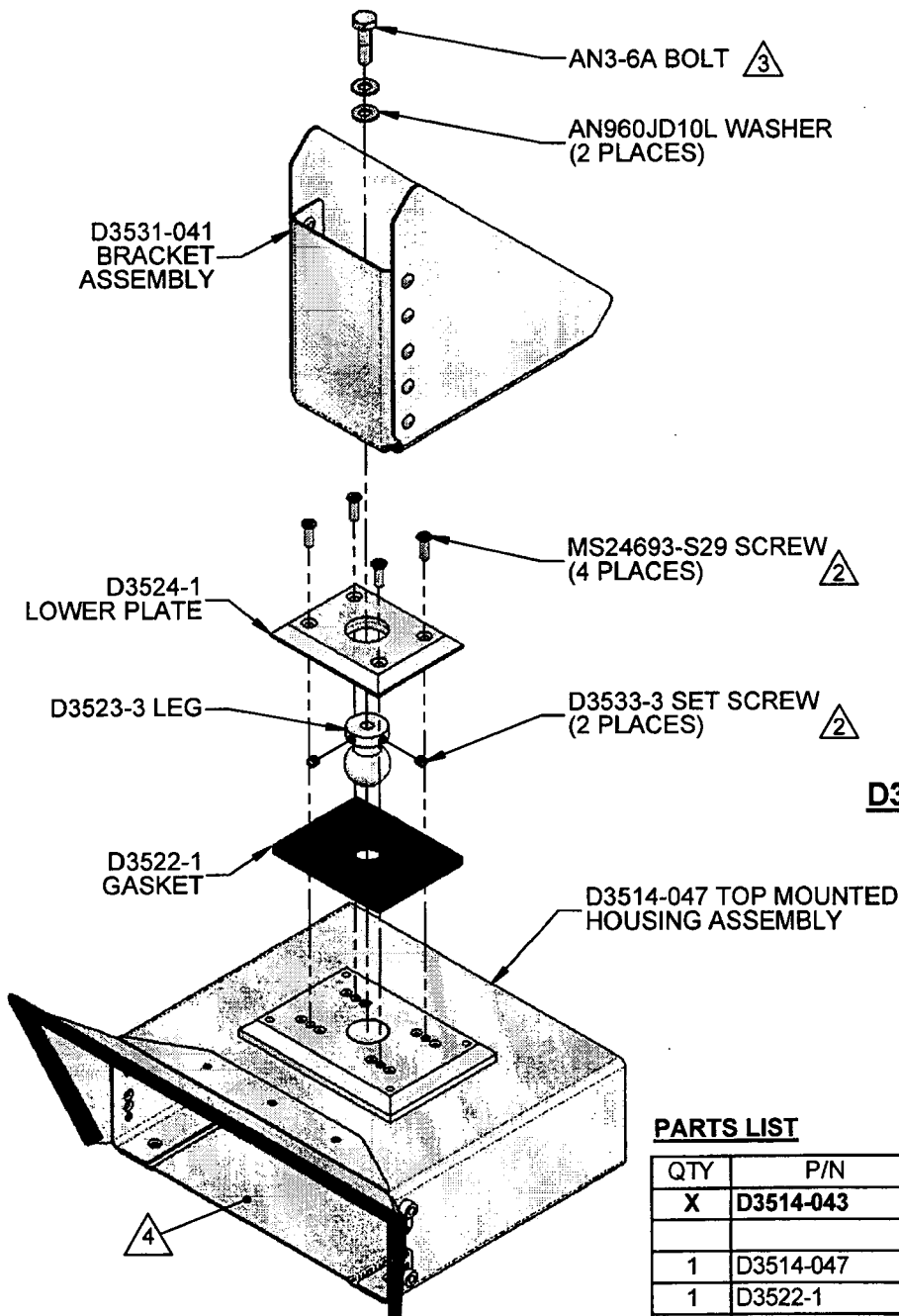
QTY	P/N	DESCRIPTION
X	D3514-041	BOTTOM MOUNTED GIMBAL ASSEMBLY
1	D3514-045	BOTTOM MOUNTED HOUSING ASSEMBLY
1	D3522-1	GASKET
1	D3523-1	LEG
1	D3524-1	LOWER PLATE
2	D3533-3	SET SCREW
1	AN3-10A	BOLT
3	AN960JD10L	WASHER
4	MS24693-S29	SCREW

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DATE 07.06.18		TITLE GPS RECEIVER HOUSING	SCALE 1:3



RELEASED  
07.08.03

**D3514-043 TOP MOUNTED  
GIMBAL ASSEMBLY**

SHIP COPY  
F. 1. 8. 0  
F. 1. 8. 0  
UNCONTROLLED COPY  
F. 1. 8. 0  
F. 1. 8. 0

45713

**PARTS LIST**

QTY	P/N	DESCRIPTION
X	D3514-043	TOP MOUNTED GIMBAL ASSEMBLY
1	D3514-047	TOP MOUNTED HOUSING ASSEMBLY
1	D3522-1	GASKET
1	D3523-3	LEG
1	D3524-1	LOWER PLATE
1	D3531-041	BRACKET ASSEMBLY
2	D3533-3	SET SCREW
1	AN3-6A	BOLT
2	AN960JD10L	WASHER
4	MS24693-S29	SCREW

**NOTE:**

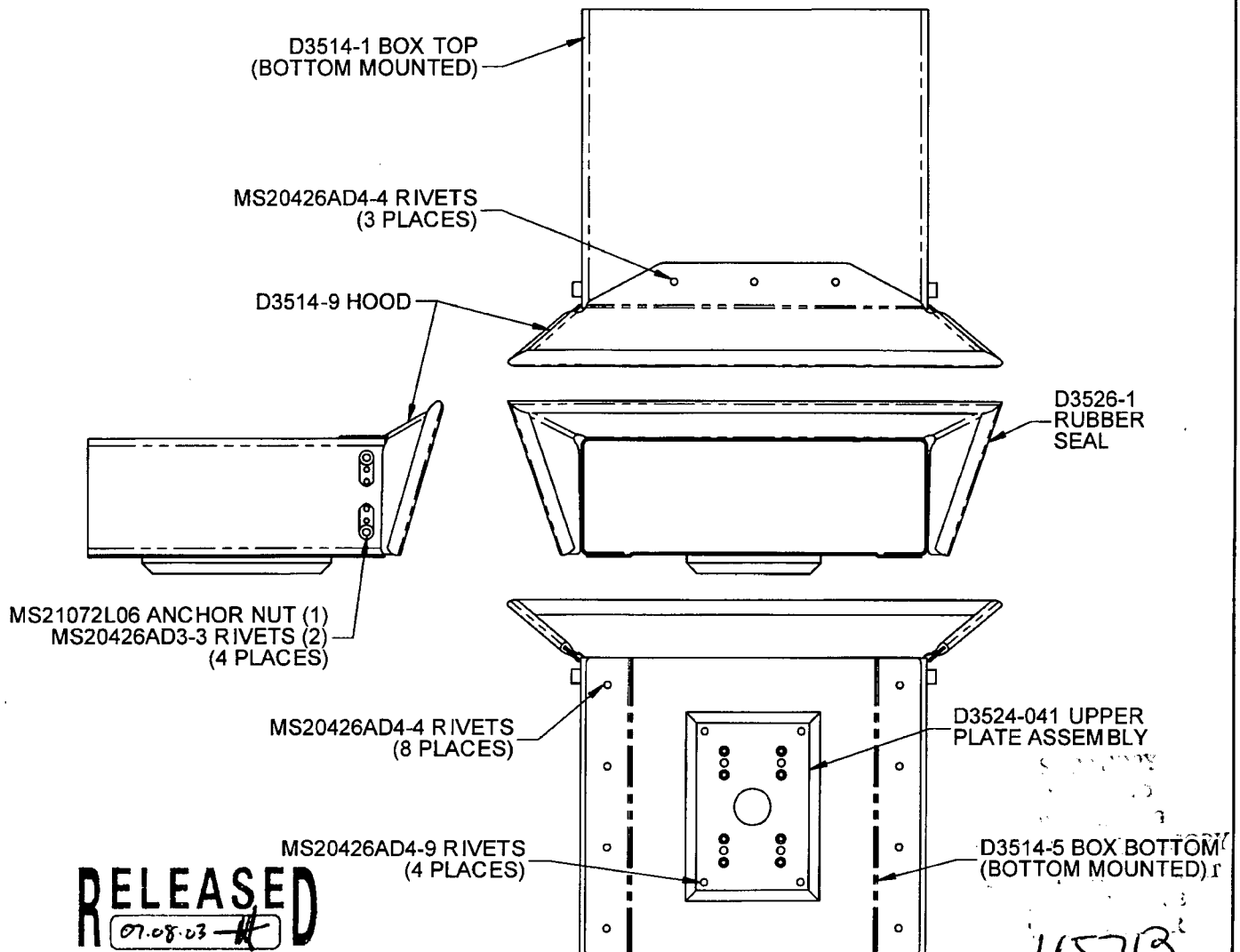
- 1) ASSEMBLE PER DART QSI 003
- 2) TORQUE SCREWS TO 5-6 in-lbs
- 3) TORQUE BOLTS TO 15-25 in-lbs
- 4) IDENTIFY WITH DART P/N "D3514-043" USING A WHITE MARKER ON THE INSIDE OF THE HOUSING ASSEMBLY WHERE INDICATED

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DATE <b>07.06.18</b>		TITLE <b>GPS RECEIVER HOUSING</b>	SCALE 1:3



**D3514-045 BOTTOM MOUNTED  
HOUSING ASSEMBLY**

**NOTES:**

- 1) POWDER COAT ASSEMBLY BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3.
- 2) ASSEMBLE PER DART QSI 003

**PARTS LIST**

QTY	P/N	DESCRIPTION
X	D3514-045	BOTTOM MOUNTED HOUSING ASSEMBLY
1	D3514-1	BOX TOP (BOTTOM MOUNTED)
1	D3514-5	BOX BOTTOM (BOTTOM MOUNTED)
1	D3514-9	HOOD
1	D3524-041	UPPER PLATE ASSEMBLY
1	D3526-1	RUBBER SEAL
8	MS20426AD3-3	RIVET
11	MS20426AD4-4	RIVET
4	MS20426AD4-9	RIVET
4	MS21072L06	ANCHOR NUT

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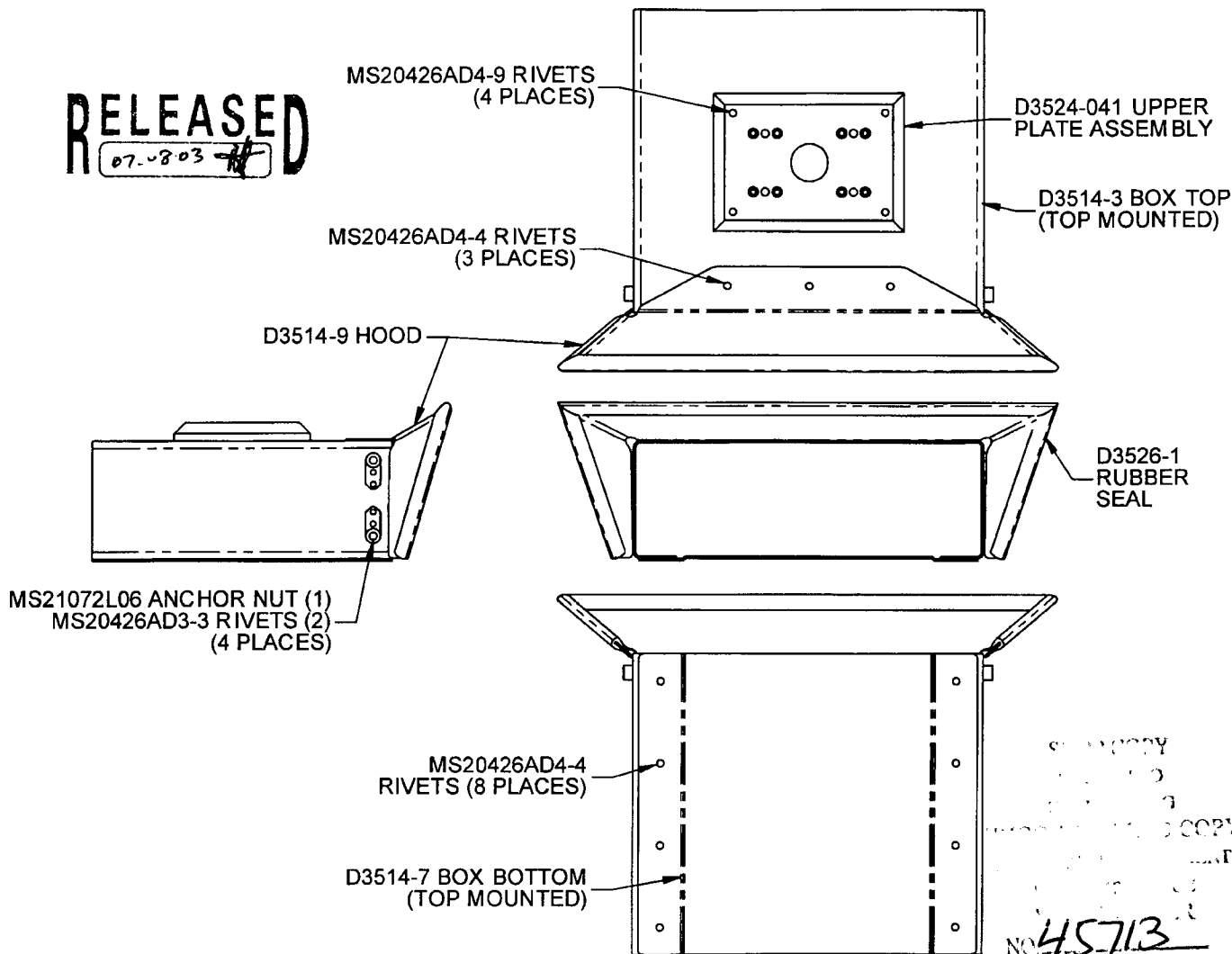
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DATE <b>07.06.18</b>		TITLE <b>GPS RECEIVER HOUSING</b>	SCALE 1:3

**RELEASED**  
07-08-03



**D3514-047 TOP MOUNTED HOUSING ASSEMBLY**

**NOTES:**

- 1) POWDER COAT ASSEMBLY BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3.
- 2) ASSEMBLE PER DART QSI 003

**PARTS LIST**

QTY	P/N	DESCRIPTION
X	D3514-047	TOP MOUNTED HOUSING ASSEMBLY
1	D3514-3	BOX TOP (TOP MOUNTED)
1	D3514-7	BOX BOTTOM (TOP MOUNTED)
1	D3514-9	HOOD
1	D3524-041	UPPER PLATE ASSEMBLY
1	D3526-1	RUBBER SEAL
8	MS20426AD3-3	RIVET
11	MS20426AD4-4	RIVET
4	MS20426AD4-9	RIVET
4	MS21072L06	ANCHOR NUT

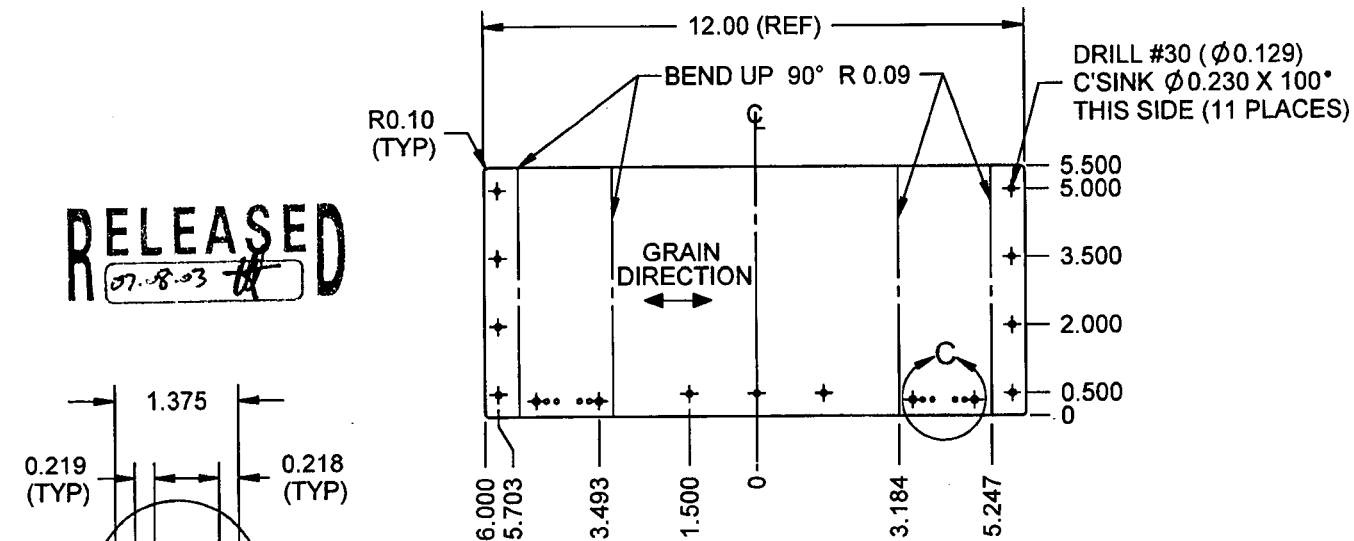
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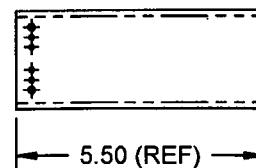
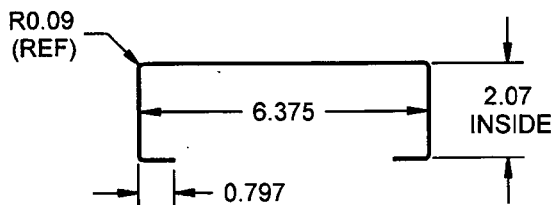
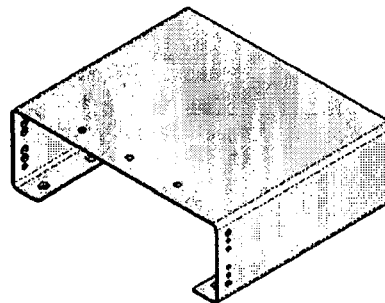


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DATE <b>07.06.18</b>	TITLE <b>GPS RECEIVER HOUSING</b>	REV. A SHEET 5 OF 9 SCALE 1:4

**RELEASED**  
07.08.03



**D3514-1F  
FLAT PATTERN**



**D3514-1 BOX TOP (BOTTOM MOUNTED)**

**NOTES:**

- 1) MATERIAL: ALUMINUM 6061-T6/T62 SHEET, 0.040 THICK PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF DART SPEC M6061T6S.040)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP CORNERS TO 0.010 MAX
- 6) PART IS SYMMETRIC ABOUT  $\phi$
- 7) C'SINKS ARE ON THE INSIDE OF PART (AFTER BENDING)

45713

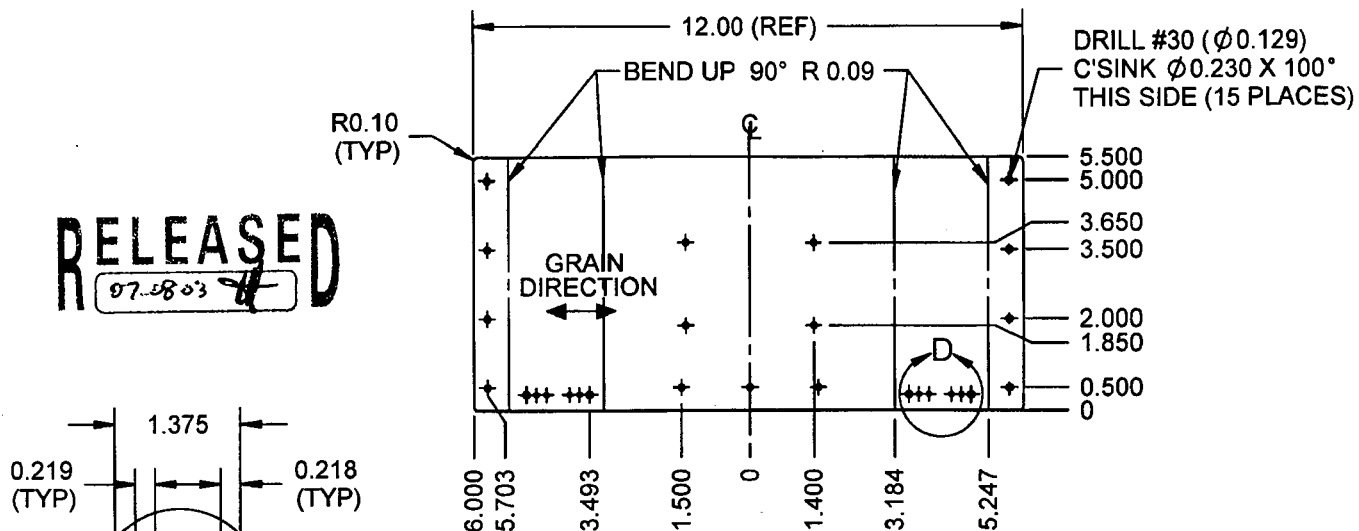
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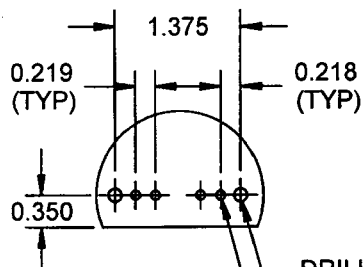


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DATE 07.06.18		TITLE GPS RECEIVER HOUSING	SCALE 1:4

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07.08.03



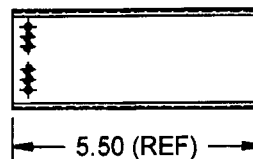
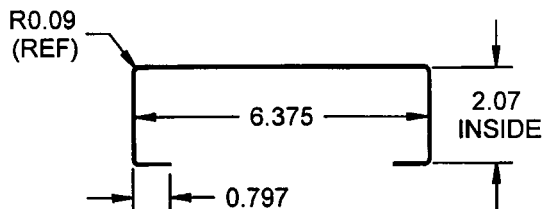
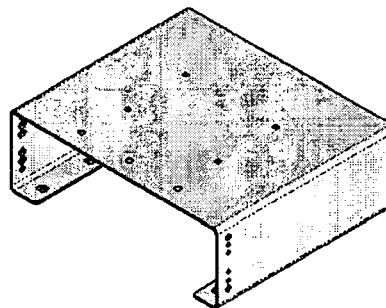
**D3514-3F  
FLAT PATTERN**



**DETAIL D  
SCALE 1:2**

DRILL #27 (Ø0.144)  
(4 PLACES)

DRILL #40 (Ø0.098)  
C'SINK Ø0.182 X 100° THIS SIDE  
(8 PLACES) FOR RIVETS



**D3514-3 BOX TOP (TOP MOUNTED)**

**NOTES:**

- 1) MATERIAL: ALUMINUM 6061-T6/T62 SHEET, 0.040 THICK PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF DART SPEC M6061T6S.040)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP CORNERS TO 0.010 MAX
- 6) PART IS SYMMETRIC ABOUT  $\phi$
- 7) C'SINKS ARE ON THE INSIDE OF PART (AFTER BENDING)

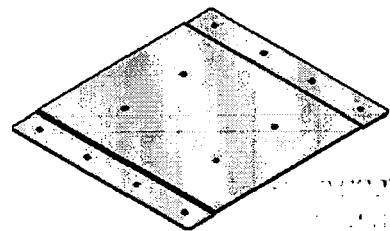
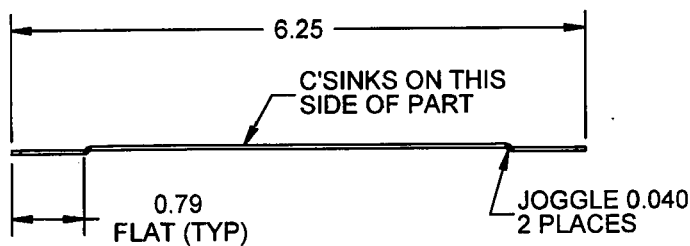
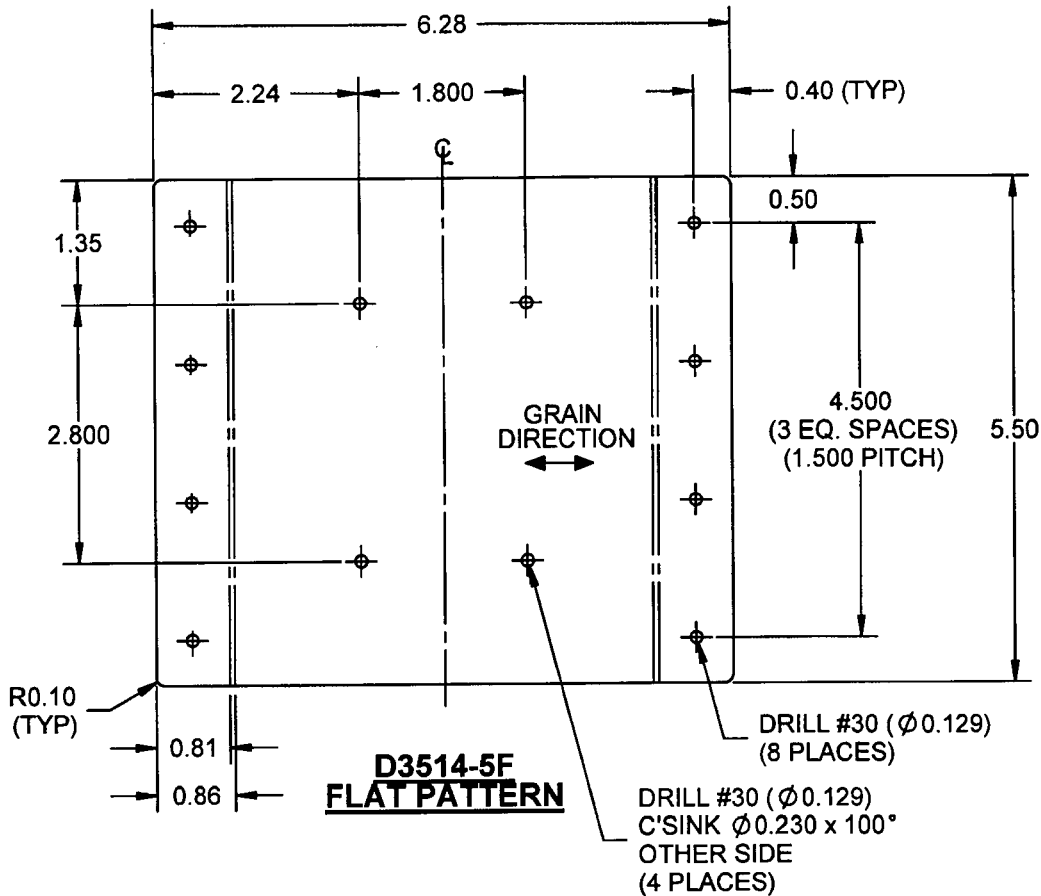
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DATE <b>07.06.18</b>	TITLE <b>GPS RECEIVER HOUSING</b>	REV. A SHEET 7 OF 9 SCALE 1:2



### **D3514-5 BOX BOTTOM (BOTTOM MOUNTED)**

#### **NOTES:**

- 1) MATERIAL: ALUMINUM 6061-T6/T62 SHEET, 0.040 THICK PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF DART SPEC M6061T6S.040)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP CORNERS TO 0.010 MAX
- 6) PART IS SYMMETRIC ABOUT  $\bar{C}$
- 7) C'SINK ABOVE JOGGLE

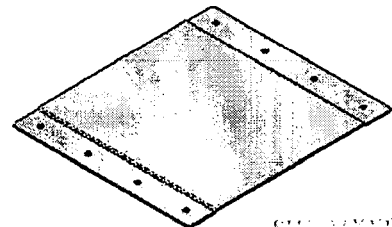
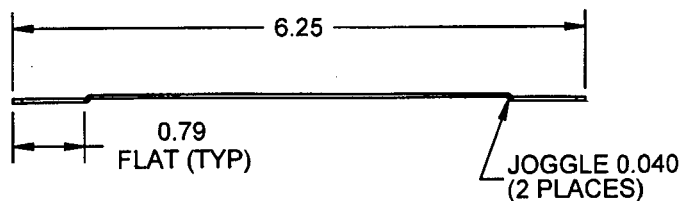
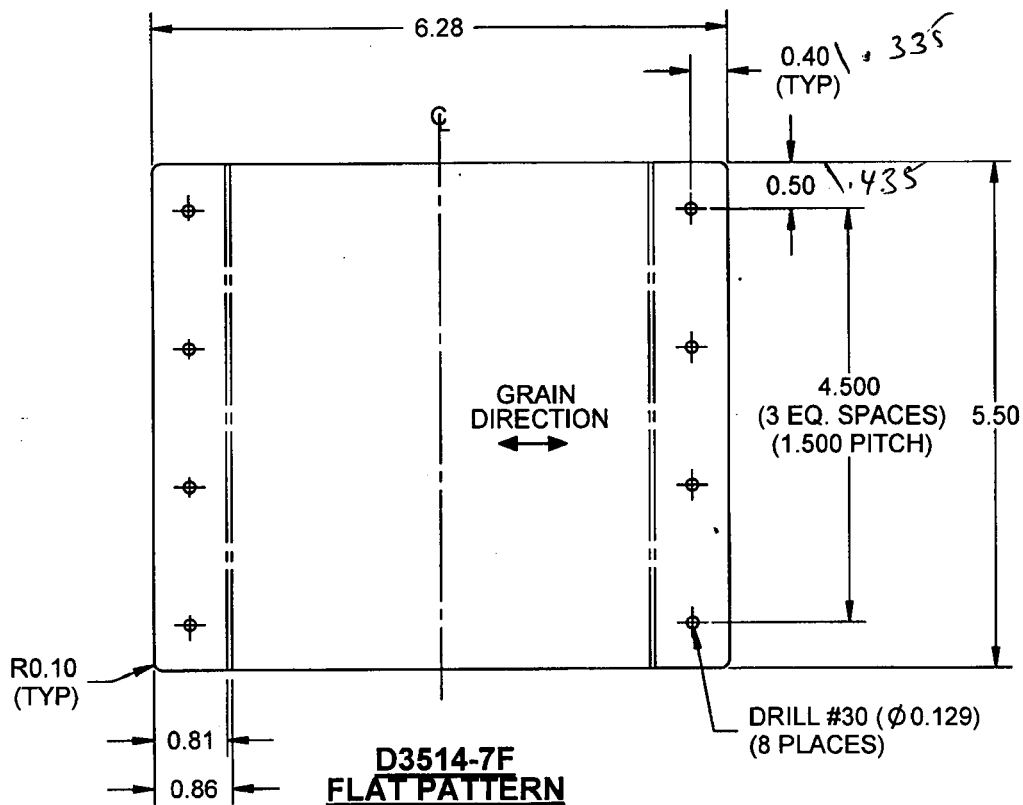
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CHECKED LE	APPROVED [Signature]	DRAWING NO. D3514	REV. A SHEET 8 OF 9
DATE 07.06.18	TITLE GPS RECEIVER HOUSING		SCALE 1:2

**NOTES:**

- 1) MATERIAL: ALUMINUM 6061-T6/T62 SHEET, 0.040 THICK PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF DART SPEC M6061T6S.040)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP CORNERS TO 0.010 MAX
- 6) PART IS SYMMETRIC ABOUT Q

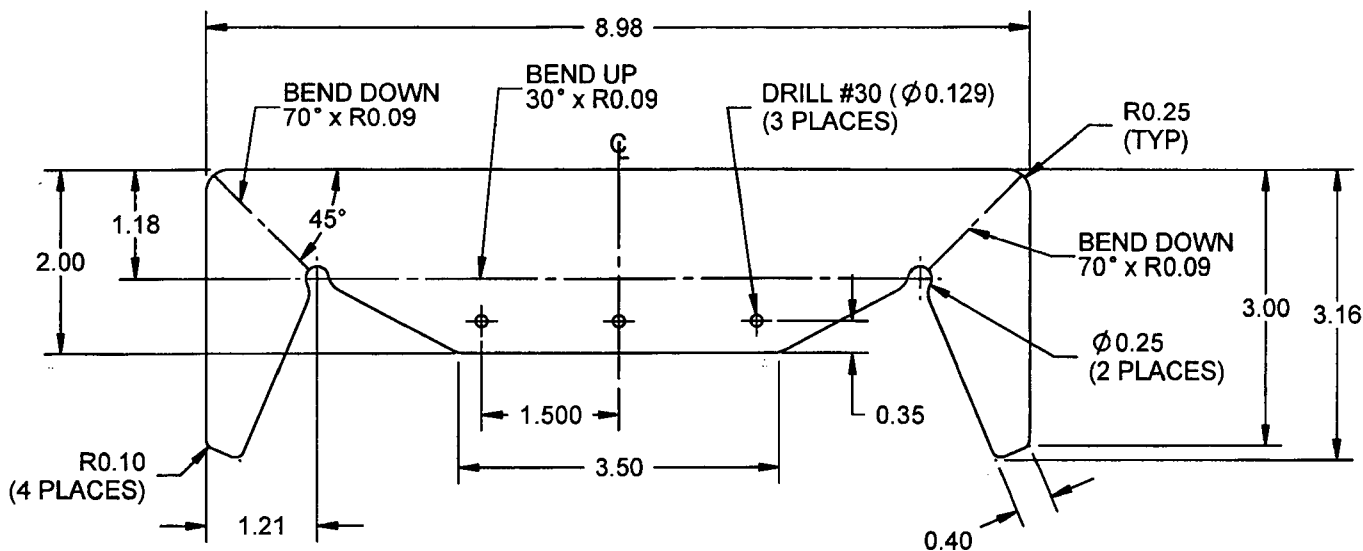
45713  
**RELEASED**  
07.08.03 [Signature]

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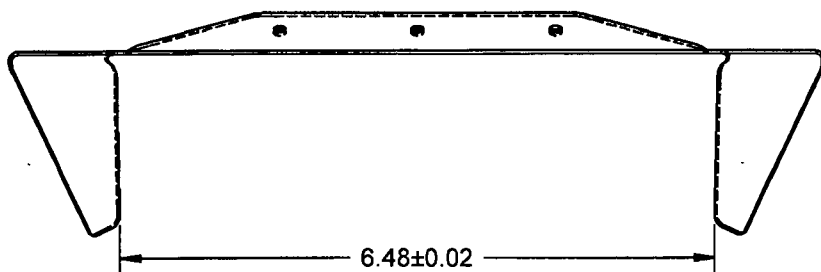
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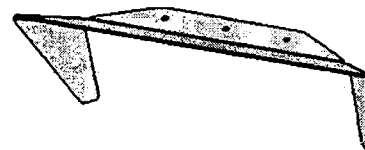
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DATE 07.06.18		TITLE GPS RECEIVER HOUSING	SCALE 1:2



**D3514-9F  
FLAT PATTERN**



**FRONT VIEW**



**D3514-9 HOOD**

**NOTES:**

- 1) MATERIAL: ALUMINUM 6061-T6/T62 SHEET, 0.040 THICK PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF DART SPEC M6061T6S.040)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP CORNERS TO 0.010 MAX
- 6) PART IS SYMMETRIC ABOUT  $\phi$

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